

## REMARKS

Claims 1-3, 5-7, 20, 21, and 34-36 are pending in the application.

The office action rejects claims 1-3, 5-6, 14-15, 19-21, and 34-36 under 35 USC §103(a) as being unpatentable over EP 506,207 in view of the Merck Index. It is the examiner's position that Applicant agrees the combination of zinc chloride with 8-hydroxyquinoline is an antimycotic and so this renders the claimed composition obvious. There is no such agreement.

Applicant's position is that, even if the prior art does suggest the combination of zinc chloride with 8-hydroxyquinoline is an antimycotic is useful as an antimycotic, this still does not render the claimed invention obvious. The Examiner's position is simply incorrect as a matter of law. Notably, the applied prior art teaches the use of zinc chloride with a laundry list – a very long laundry list – of antimycotic agents. The claimed material 8-hydroxyquinoline is not specifically included in that list, although halogenated derivatives and sulfated derivatives are on the list. Thus, what is claimed is technically "new" because 8-hydroxyquinoline is not on the laundry list. This means that the Examiner's attempt to distinguish Hess, Heinze and Papesch (see pages 2-3 in the Office Action of 4/13/09) on the basis that the claimed composition is not "new" fails. The composition is new in the sense that 8-hydroxyquinoline is not specifically named.

If the Examiner is correct that the prior art suggests the combination as an antimycotic, then it remains entirely possible for Applicant to obtain a patent under any one of Hess, Heinz or Papesch. All then that the examiner has done is to demonstrate a prima facie case of obviousness, which may be rebutted by a showing of unexpected results:

When a chemical composition is claimed, a prima facie case of obviousness under § 103 may be established by the PTO's citation of a reference to a similar composition, the presumption being that similar compositions have similar properties. *See In re Dillon*, 919 F.2d 688, 692, 16 U.S.P.Q.2D (BNA) 1897, 1901 (Fed. Cir. 1990) (en banc) ("structural similarity between claimed and prior art subject matter, . . . where the prior art gives reason or motivation to make the claimed compositions, creates a prima facie case of obviousness"), cert. *denied*, 500 U.S. 904, 114 L. Ed. 2d 77, 111 S. Ct. 1682 (1991). One way for a

patent applicant to rebut a *prima facie* case of obviousness is to make a showing of "unexpected results," i.e., to show that the claimed invention exhibits some superior property or advantage that a person of ordinary skill in the relevant art would have found surprising or unexpected. The basic principle behind this rule is straightforward -- that which would have been surprising to a person of ordinary skill in a particular art would not have been obvious. The principle applies most often to the less predictable fields, such as chemistry, where minor changes in a product or process may yield substantially different results.

*In re Soni*, 54 F.3d 746, 750 (Fed. Cir. 1995)

It does no good for the examiner to argue obviousness on the basis of equivalent antimycotic functionality—unless of course the examiner also maintains that each and every material in the laundry list of antimycotics in EP 506,207 also functions as an anticancer agent when combined with zinc or zinc chloride. If that is the examiner's position then the examiner should state so on the record which, not unintentionally, would rebut that finding by a showing of comparative utility. Zinc chloride combined with 8-hydroxyquinoline sulfate is not effective for purposes of the invention, whereas Zinc chloride combined with 8-hydroxyquinoline is effective. The examiner is simply wrong as a matter of law on the premise that a *prima facie* case cannot be rebutted. This one, if it exists, has been rebutted.

The addition of United States Patent No. 4,780,320 as applied to claim 15 does nothing to overcome this defect in the rejection. Nothing in the combination teaches or suggests anticancer activity as shown in the current specification. The '320 patent is merely used to show prior use of a Pluronic-type of gel polymer.

The addition of pages from the Merck Index as applied to claims 16-18 to show prior use of lecithin or DMSO does nothing to overcome the basic defect. Nothing in the combination teaches or suggests anticancer activity as shown in the current specification.

The addition United States Patent No. 3,637,772 as applied to claims 19-21 and 34-36 to show prior use of nordihydroquiaretic acid and ascorbic acid does nothing to overcome the basic defect. Nothing in the combination teaches or suggests anticancer activity as shown in the current specification.

The claims are patentable for the above reasons. This response is being filed with required fees for a Request for Continued Examination and Petition for Extension of Time. Applicant believes that no additional fees are due at this time. However, if any additional fees are due, the Commissioner is authorized to charge them to deposit account No. 12-0600.

Respectfully submitted,

LATHROP & GAGE LLP

By: 

Dan Cleveland, Jr., Reg. No. 36,106  
4845 Pearl East Circle, Suite 201  
Boulder, Colorado 80301  
Telephone: (720) 931-3012  
Facsimile: (720) 931-3001